

To: Montgomery County Council President, Gabe Albornoz and Councilmembers

From: Roberta G Steinman

Subject: Testimony on Bill 25-22, Forest Conservation - Trees

I do not support allowing existing forests to be used as mitigation banks. I support preservation and expansion of our forests and forested ecosystems. Therefore, I do not support the passage of Bill 25-22 because it will lead to a net loss of forests and forest ecosystems.

PRELUDE: We are in an era of Climate Chaos, Plunging Biodiversity, and Worldwide Forest Loss. Retaining and increasing our natural forest ecosystems is the best technology and our best hope to mitigate the worst impacts of climate disruption and help bring back balance to our planet, our home. Forests are a refuge for biological diversity and a sink for carbon sequestration. Our future lies with the temperate forests of the Eastern U.S. – preserving the older forests, safeguarding the young forests, and encouraging the regeneration of new forests. So it all comes down to whether or not **we are going to protect our temperate forests of the East**. Do we continue to cut them down for various commercial purposes, or do we preserve and expand them?

PRESERVE AND EXPAND OUR FORESTS

The urgency of the climate situation requires preservation and expansion of our forested ecosystems. The **“No Net Loss” vision, while laudable, is not a viable strategy because it does not protect existing forest ecosystems, nor does it allow for natural regeneration to increase forest preservation.**

Allowing existing forests to be used for forest mitigation requirements leads to **net loss** of mature or maturing forest along with the loss of complex ecological relationship with ecological value. **We cannot “plant” a forest ecosystem.** Forest ecosystems, especially mature forest ecosystems, cannot be duplicated. We humans simply cannot “plant” a forest that replicates the ecological services that are lost. It takes several hundred years for forest soils to develop and for forest canopy, sub-canopy, and understory to develop to full maturity. These qualities simply cannot be recreated by planting. With the window quickly closing for effective climate action, **we need to preserve all our existing forests**, and encourage expansion of our forests through a natural regeneration process.

In October 2020, Attorney General, Brian Frosh responded to a question from Steuart Pittman, Anne Arundel County Executive as to whether the Forest Conservation Act permitted existing forests to be used as mitigation banks rather than using created (afforestation) or restored (reforestation) forests as mitigation banks. Frosh concluded that the language of the Forest Conservation Act made a clear case that “the only forests in Maryland that are eligible for treatment as “forest mitigation banks” from which developers may buy credits for that offset method are forests that were “intentional[ly]” created or restored “expressly” for that purpose..” In other words, existing forests were not allowed to be used as mitigation banks under the Forest Conservation Act. I believe this interpretation offers the correct course of action for our time.

ENVIRONMENTAL SIGNIFICANCE OF FOREST PRESERVATION - HEALTHY AIR, LAND, WATER, AND COMMUNITIES

- **HEALTHY AIR →** In this time of climate chaos and elevated greenhouse gas emissions, the critical role of forests cannot be overstated. Forests sequester carbon thus reducing greenhouse gases in the atmosphere. Annually, one acre of trees can remove 40 tons of carbon from the air and produce 108 tons of oxygen.¹ Trees filter out pollutants and release fresh oxygen. Forests clean the air of particulate matter, and their cooling effect counteracts the urban heat island effect.

¹ Conserving the Forests of the Chesapeake: The Status, Trends, and Importance of Forest for the Bay’s Sustainable Future, USDA Forest Service, 1996. P.7

- **HEALTHY LAND →** Forests are critical for the protection and restoration of biodiversity. Forests provide habitat and migration corridors for native flora and fauna (birds, bugs, and other animals), thus promoting sustainability of the native species. The decay of the forests' fallen leaves and deadfall enrich the composition and texture of the soil, thereby creating healthy, fertile soil essential to the fungal relationships that support the life of the forest.
- **HEALTHY WATER →** Forests are the most beneficial land use in terms of water quality. By absorbing water, the forested ecosystem filters the water, feeds the forest soil and wetlands, and provides the mechanism for groundwater recharge for the seeps, springs, and creeks. Forests are also our best storm management system. By retaining water, the forests stabilize the soil and reduce runoff that would otherwise pollute the streams with toxins and sediment.
- **HEALTHY MONTGOMERY COUNTY FAMILIES →** Preserving our existing forests provides economic and health benefits for Montgomery County families.
 - Health care costs are reduced with improved air quality.
 - Forests protect the water we drink. Every 10% increase in forest cover in a watershed produces double the savings in water treatment downstream, according to research reported by American Forests.²
 - Forests reduce flooding. The loss of forests can result in increased property damage to homes and businesses.
 - Forests moderate or buffer weather extremes. Trees cool the air and reduce the need for air conditioning because they provide shade cover and transpire moisture.
 - Forests contribute to a higher quality of life. By connecting us with nature, forests improve human health, reduce stress and give people a sense of well-being. The beauty and grace of the forest trees provide aesthetic benefits, and the uplifting nature of trees offers Peace and Serenity. Studies show that populations living near forested areas exhibit lower asthma, diabetes, and high blood pressure rates.

RECOMMENDATIONS:

- **Do not allow existing forests to be used as mitigation banks.**
- **Protect existing Forest Ecosystems and provide for the expansion of forests through natural regeneration.** Preserve all remaining Forests in Montgomery County to protect existing forest ecosystems.
- **Prioritize natural riparian forest regeneration.** To improve the water quality in Montgomery County, allow for the reforestation of riparian areas that are currently without forest cover to regenerate naturally. This applies to watercourses of all sizes. If natural regeneration is not practical, replant only with locally native species. Upland forest regeneration is also very important but should not be prioritized ahead of the riparian forest restoration.
- **If there is to be tree replacement, strengthen tree replacement requirements at a 2:1 ratio based on Diameter at Breast Height. To ensure no-net-loss of forests after development,** state and local entities should calculate tree replacement replanting at a 2 to 1 ratio based upon the diameter at breast height (dbh) lost. For example, the loss of one 24" dbh tree would be replaced with sixteen 3 inch dbh trees or twelve 4 inch dbh.

CONCLUSION

Forests are vitally important for sustaining life on Earth and play a major role in the fight against climate change. If we are really serious about tackling climate change and the decline in biodiversity and achieving "No Net Forest Loss," we need to preserve our forests and allow them to naturally regenerate. This is the most cost effective way to fight climate change. Preserving and expanding our forested ecosystems is crucial for sustaining life on Earth!

² Maryland League of Conservation Voters, HB991, Forest Conservation, Mar2021.